REVIEW ARTICLE

Clinical teaching with emotional intelligence: A teaching toolbox

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Background: Emotional intelligence (EI) helps humans to perceive their own and others' emotions. It helps to make better interpersonal communication that consequently leads to an increase in everyday performance and professional career. Teaching, particularly teaching in the clinical environment, is among the professions that need a high level of EI due to its relevance to human interactions. **Materials and Methods:** We adopted EI competencies with characteristics of a good clinical teacher. As a result, we extracted 12 strategies and then reviewed the literatures relevant to these strategies. **Results:** In the present article, 12 strategies that a clinical teacher should follow to use EI in her/his teaching were described. **Conclusion:** To apply EI in clinical settings, a teacher should consider all the factors that can bring about a more positive emotional environment and social interactions. These factors will increase students' learning, improve patients' care, and maintain her/his well-being. In addition, he/she will be able to evaluate her/his teaching to improve its effectiveness.

Key words: Clinical teacher, clinical teaching, emotional intelligence

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INTRODUCTION

What is emotional intelligence?

From 1900 to 1920, researchers investigated and found out that individuals with lower intelligence quotient (IQ) achieved more success in their life compared to others with higher IQ. Considering such a controversy, Sir Thorndike introduced social intelligence as an ability to cope with others.[1] Then, Howard Gardner suggested multiple intelligences to expand intelligence beyond the cognitive domain.[2] Peter Salovey and John Mayer believed that emotional intelligence (EI) was a subcategory of social intelligence. They suggested four branches of EI: emotion perception and expression, use of emotions, emotional understanding, and emotional management.[3]

Bar-on and Daniel Goleman described EI in a wider concept. In the model suggested by Bar-on, EI is considered as a collection of social, personal, and emotional interrelated abilities that determine individuals' general ability to efficiently cope with everyday life needs and stresses.[4] Goleman also stated that EI brings about the main background to obtain a spectrum of emotional abilities that lead to individuals' excellent professional performance. Goleman's model included four domains of self-awareness, self-management, social awareness, and relationship management that cover abilities such as self-confidence, empathy, influence, emotional self-control, transparency, and the ability of team work.[5] Later, Zins *et al*. added the ability of responsible decision-making to the domains of Goleman's model.[6]

Although there are various interpretations for EI, researchers in this field believed that EI should be considered to improve individuals' performances.[7] Some professions in which individuals either have high interactions or have to bear a high work overload

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or heavy team work need a significant level of EI.[7] It should be noted that teaching ranks at the top among such professions[8] as it needs direct human interactions; therefore, it has an emotional dimension.[9,10]

What are the roles of emotional intelligence in teaching?

Researchers believe that the teachers, in addition to their expertise in the subject and learning-teaching knowledge, need EI and if they neglect EI in their teaching, the value of their knowledge in the subject and their learning-teaching methods decreases considerably and consequently, this results in learners' failure. In fact, teaching with EI refers to the teacher's attention paid toward the emotional dimension of teaching–learning in order to increase students' leaning.[11,12]

A socially and emotionally competent teacher makes a proper communication with the learners, has effective classroom management, and succeeds in the implementation of social and emotional learning programs. He/she creates a positive climate in the class through control of three aforementioned factors that result in better academic performance and learning of socioemotional skills by students.[13] In addition, this competency helps teachers to diminish their occupational stress through emotional self-control.[13,14]

A consideration of the clinical environment reveals the importance of teachers' socioemotional competence and helps them to teach more efficiently in such situations, compared to nonclinical environments. In such situations, is learning triad the student, the patient, and the tutor, along with other members of the health care team highly interact with one another.[15] The numerous roles of the teacher — various students' interests, maintaining patient safety was mentioned, and unpredictability of the discussed subject are challenges for a clinical teacher.[16,17] Moreover, most of the time, the patient is too ill or frail and consequently he/she finds a scientific discussion by the bedside to be boring.[18] On the other hand, in such situations the students experience emotions and stresses such as fear to practice practical skills, empathy with patients, stress from time constraints, and unrealistic expectations that can play a role in their tiredness and decrease their learning.[19]

Therefore, with regard to the importance of using EI in clinical teaching efficacy, strategies that a clinical teacher adopts to apply EI in teaching have been reviewed in the present paper.

MATERIALS AND METHODS

In order to address this aim, the constructs of EI that Goleman introduced were used. Goleman defined the EI competency model. In this model, EI includes 18 competencies and each competency is defined with four behaviors.[5] We defined these competencies in our words and extracted examples of these definitions in clinical teaching. For this purpose, the paper of Sutkin *et al*. was also used. They had conducted a systematic review and identified the characteristics of a good clinical teacher in medicine. For example, they identified that a good clinical teacher is accessible.[20] We (AO, FH, and PA) adopted these characteristics with each behavior of an emotionally intelligent person. Therefore, the availability of a good clinical teacher was matched with service orientation. As a result, we extracted 12 strategies that a good clinical teacher with high EI uses. These strategies can be divided into three phases: before rounds, during rounds, and after rounds.

After this phase, we searched databases (MEDLINE, Proquest, Scopus, ERIC, and ISI Web of Science) for the relevant literature published on each of these strategies. The search strategies were based on a combination of synonyms of relevant components: EI, teacher, education, and each of the strategies. A subsequent hand search of high-yield journals in medical education was performed followed by a search of reference lists of all full-text studies, and the snowballing of relevant references. One author (AO) scanned all the identified titles and abstracts to identify potentially relevant articles. Then, full-text versions of these articles were obtained. As the aim was to produce a description of each strategy and to determine the relevance of these with EI, the studies that best addressed the aim of this review were included. The review was selective in its approach and the selection of studies followed the published guidelines to ensure rigor.

BEFORE ROUNDS

Know your emotions and attitudes and manage them

The first step to start a communication and the key to use EI is emotional self-awareness. People with this capability are aware of their extreme emotions such as anger and disgust and think about the possible reasons and triggers through emotional self-awareness. They also try to manage such emotions and have timely reactions and consequently, can conduct the teaching process despite their tiredness and irritability resulting from their work overload. They also have a proper reaction while staying calm and having self-confidence in stressful and unpredictable situations of clinical teaching, and ultimately, manage events better.[21-24] Such teachers emotionally support their students by staying calm, as they know that anxiety will disturb learning.

Teachers with EI know their emotions and find out how to induce self-eagerness and motivation.[13] They can show their interest in teaching and educational content through their enthusiasm and emphasize on the importance

of educational content. In such a condition, through observation of the teacher's enthusiasm, the learners too express their interest in learning.[25]

Teachers' awareness of how they communicate with others and their attitude toward learners are important. Does the teacher believe that learners are persecutors who lack adequate knowledge? Or does he/she believe that the patients and personnel help him/her in the experience of teaching? The attitudes of the teacher will affect how he/she feels and behaves. At this stage the teacher should manage his/her attitudes.[12]

Pay attention to survival needs

The most important and clear human need is the physiological need. Crowded wards and clinics with low ventilation and limited space can contribute as obstacles for patients and students comfort. A teaching session can be boring to some, especially for the seriously ill patients.[26] There is less chance to encourage a tired and anxious student to participate in educational activities.[27] On the other hand, no one can expect a tired teacher to teach properly.[10] A clinical teacher with EI understands these needs and finds a way to create positive emotional conditions, both in the students and patients. Such a teacher pays attention to select a proper physical environment and run the round in locations such as patients' bedsides, corridors, day rooms, and conference hall, based on their educational goals. They manage their available time, based on the different functions of educational rounds, work rounds, and chart rounds. In addition, regulating the residents' and interns' working hours and planning for a midday nap in long shifts may be helpful.[28-31]

Design a motivational environment

Alan Mortiboys, quoting from Guy Claxton, wrote, "Learning itself is an intrinsically emotional business and that learning process in each field can bring about struggle, hopelessness, and eagerness."[12] A teacher should be able to recognize the emotional dimension of learning and work with it to improve learning.[11,32]

During an experience, the emotions are under influence of some personal and environmental factors. If the students feel that educational activities and tests are at their level of abilities and find the subjects helpful for their future career, they consequently experience positive emotions in learning.[33-35] On the other hand, the goals that the learners set for themselves are also important in their motivation and performance. Therefore, if someone have mastery goals, he/she adopts in-depth learning strategies and self-directed learning. He/she also makes every effort to learn, and experiences positive emotions. On the contrary, the learners who follow obtaining a good score, they have performance goals. These learners show off their ability and adopt superficial strategies and experience negative emotions during more difficult educational activities. In addition to personal factors, environmental needs such as sociocultural background, level of the teacher's emotional support and cognitive support, and the general environment of learning have an effect on emotions.[32,36]

Socially and emotionally competent teachers accept the students' differences and their various needs and know their emotions and the things that motivate them[37] and therefore, try to design a proper learning environment based on learning theories, which lead to students' motivation and performance improvement.[32] Such teachers design clinical teaching based on the students' needs with a clear structure relevant to their level. They also make learning activities coincide with whatever that motivates the students.

DURING ROUNDS

Increase rapport

The communication between teachers and students highly influences teaching-learning and reveals almost half of teaching efficacy variance.[38] In addition, in a clinical environment most of the teaching process occurs in the form of one-on-one communication between a supervisor or mentor and a student. The efficacy of such supervision is highly dependent on the quality of teacher–student communication so that their interaction plays a critical role in making a positive experience.[39] This type of communication that facilitates learning is called educational alliance. On the other hand, the efficient patient–physician communication, called therapeutic alliance,[38] is of great importance for the administration of a relationship-centered care.[40]

A socially and emotionally competent teacher succeeds in the initiation and management of an efficient communication. Such a teacher welcomes the student, the patient, and other members present in a clinical environment. He/she voluntarily expresses her/his thoughts to let others express their own concerns. Moreover, such a teacher tries to choose the proper words to start a communication and refers to the individuals with their names. He/she listens to them and monitors their nonverbal language to understand their messages. In such an environment, students are encouraged to state their concerns freely through verbal and nonverbal forms of communication, and due to such behavior of the teacher, they feel free to ask questions. Communicating with students, empathizing with them, and paying attention to their comments on the event occurring in the rounds, help the teacher to detect the existing concerns. Obtaining consent from the patients shows respect being paid to their viewpoints and emotions.[41]

In addition, the use of icebreakers including activities that let students express their thoughts and feelings as much as possible help them to communicate and interact.[42] If the learners do not know about one another, they manifest a stereotypical behavior that results in misunderstanding each other's behaviors and causes conflicts.[43]

Be transparent

Residents, professors, and hospital staff are in daily contact with the students in a clinical environment. The students' close contact with these groups for long hours in clinical settings is the reason why most of the learning usually occurs through students' observation of their attitudes and behaviors.[44]

Bandura suggested attentional processes as one of the efficient processes in observational learning. He stated that in such processes, the model must be attended to before something could be learned from a model. Characteristics such as respectability, high social status, high competence, and power of the model have an effect on the observer's attention.[45,46]

Research in the field of medicine showed that students seek specifications such as enthusiasm, compassion, intellectuality, openness, and proper communication with the patient in their selected role models.[47] In such an environment, a teacher with a high EI has transparency, which refers to compliance with ethics, principles, and values. He/she keeps promises, identifies and highlights ethical issues, publicly admits mistakes, and acts on values.[5,48] This teacher can be a positive role model for the students by having characteristics such as communicating properly with others, optimism, self-esteem, flexibility, and patience.[49,50] He/she influences others by presenting an appropriate behavior and gaining their respect.[5]

Teach creatively and create an emotional learning environment

At present, selection of a teaching methodology based on learners' characteristics, learning goals, and social values is emphasized. It refers to the fact that the teachers should be prepared to apply and creatively form various educational models.[51] In addition, exposure to vast changes in medical education, unpredictability, and sophistication of the clinical environment reveal the need for teachers with adaptability.[52] Therefore, creative teaching is counted as a professional skill and as a responsibility of teachers.[53]

Creative teaching needs special knowledge and attitude. A teacher who wants to teach creatively should first know about teaching-learning theories and then harbor the ability to cope with stress, adequate motivation and EI, and a proper attitude needed for creative teaching.[54] Goleman points out the abilities of innovation, initiation, and adaptation as the abilities of a person with high EI.[5]

Creative teachers create a joyful and satisfactory experience for themselves and their learners.[53] In fact, creative teaching strategies lead to increased fun for students in learning, more active attendance by them in classes, and more attention paid by them.[54,55] In this direction, applying methods such as puzzles, team work, drawing a map or diagram, designing a play, role play, and a creatively written text instead of giving a lecture in clinical rounds can give the learners a joyful experience.[54,56] When a teacher displays his/her creative skills, he/she creates a background for the growth of these skills among the learners as well.[57]

Pay attention to social and emotional learning

Promotion of students' social and emotional competencies increases their academic performance; by forming a community of students who support and take care of one another, it would reduce disruptive behavior.[6,58] These abilities are the foundation for educating professionalism and moral sensitivity[59-62] and are in direct relationship with interpersonal and communication skills,[63] leading to increased trust in clinical interactions.[64]

A teacher with socioemotional abilities is successful in teaching socioemotional competency. Such a teacher is a role model for such skills[13] and displays empathy and communication skills when faced with a real or a standardized patient. In addition, he/she can prepare appropriate conditions for learning such skills through the formation of a cooperative community and constructive conflict resolution.[65]

When a learner works alone with no interaction, social skills and prosocial values cannot be grown and socioemotional learning may be reduced in a competitive environment.[6] Therefore, a teacher should design team learning activities and encourage the students to work together.[66] Designing a problem or a case is also helpful in producing scientific conflicts. Students learn the rules of discussion and get help from their group mates for solving such problems so that ethical and citizenship values such as being concerned about others and empathy are formed.[6]

Building socioemotional competency is impossible by only focusing on individuals and their abilities. A safe, supportive, and caring environment is needed for socioemotional competency to succeed,[6] in which policies, rules, and personnel should support collaborative learning.[58]

Managing the social environment

Shaping physicians' behaviors during their education occurs in a sophisticated network of communications including several people in different professions with various educational backgrounds from both inside and outside the medical school.[67] The main goal of such teams is the promotion of patients' care.[68] On the other hand, the students at different levels in the clinical environment have the chance to gain interprofessional education in which learning from peers, with peers, and about peers is a part of the educational experience.[68] This has an important effect on learning, the students' social identity, and his/her professional behavior.[40]

A teacher with high EI can create a formal and vast network of communication.[69] Such a person encourages the group members to cooperate and makes them enthusiastic about team work.[13] He/she seeks to create a group identity, spirit, and commitment, and encourages the learners to know and like their peers in the group.[25] Such a person establishes relationships that enables communications that have a reciprocal benefit and tries to solve problem(s) when any conflict occurs.[69] At the beginning, when communication and learning groups are being formed, setting down rules and regulations prevents the incidence of wrong behaviors and results in a regulated society. This encourages the students to be accountable for their behaviors.[70]

A socially and emotionally competent teacher pays close attention to the students' relationship with others in order to detect and manage the challenges that students face. In addition, through recognition of the hidden curriculum, such a teacher affects and helps the students to enhance their consciousness toward this communication network and the messages transferred through it.[67]

Create a supportive environment

Whenever a student has a question, there is a chance for the teacher to adopt his/her own EI skill to answer it. If the teacher manages his/her answer well, he/she can positively affect the learners' motivation and emotional environment.[12] In tailoring the answers, the teachers should pay much attention to cognitive and emotional level. At cognitive level, teachers answer enhances students' understanding and at the emotional level, it can influence their enthusiasm and self-confidence.[12]

When students fear to practice an invasive practical skill, a clinical teacher with high EI is aware of their fears and designs a supportive environment for the students to practice them new skills and encourages them to develop self-confidence. In such an environment, students conduct interviews of and physical examinations on the patients with no tension.

On the other hand, a clinical teacher should also meet patients' expectations at bedside teaching. The patient, worried about his/her disease, expects to be treated by her/his physician. When the patients face the students who examine and treat them, they consider themselves to be tools for education,[71] and the existence of factors such as having no choice, revelation of their secrets, and the feeling of being in danger of physical hazards reduce their motivation to participate in education.[41,72] On the contrary, when patients' rights are respected, they enjoy participating in clinical education.[73-79] Therefore, a teacher with socioemotional ability and respect for patients' rights creates an environment in which patients can freely ask questions about their illness and express their own feelings.

AFTER ROUNDS

Give interactive feedback

Goleman believes that one of the competencies of EI is the competency in developing others. A person with high EI detects others' talents and gives them effective feedback.[37] Feedback is a form of communication[80] in which information is obtained by observation of the student's performance, and is transferred in a safe environment through reciprocal teacher–student interaction.[81]

A teacher with high EI forms the dialogue in a nonthreatening and respectful atmosphere while being aware of learners' thoughts and feelings,[81-84] which reduces learners' resistance against feedback messages.[85] Such a teacher first listens to the learners before giving them feedback[86] and helps them to manage their emotions.

At the beginning of each rotation, a teacher should ask his/her students about how they would like to receive feedback and the plans for the same.[87] Before giving feedback, he/she should make plans with her/his students in order to choose the best time and place.[81,84] He/she orients students to what is expected from feedback and shows her/his concern about their improvement.[81]

A teacher with interpersonal skills uses the viewpoints of patients, staff, and other colleagues to assess learners' performances and complete her/his observation.[87] In addition, he/she encourages learners to seek feedback from different resource.[88]

Evaluate your teaching

One of the features keys of functioning with high EI is self-assessment, reflection on past experiences, and working cooperatively with others. In the self-evaluation process, a teacher judges her/his efficacy, adequacy in knowledge, performance and beliefs, and detects her/his strengths and weaknesses.[89] In such a process, the teacher is aware of her/

his teaching status through a reflection on her/his teaching experiences and with reference to scientific evidences. In addition, he/she does not get defensive on receiving feedback and even asks others (colleagues, personnel, and students) to honestly express their viewpoints about her/his clinical teaching.[37,90] In this way, students also find it easier to accept their teacher's feedback.[87] Goleman believes that people with high EI adopt such a process to improve themselves and develop better criteria for better performance,[91] and optimistically provide opportunities to modify their function. Such a teacher can manage her/his communication with those present in the clinical environment through revising the knowledge he/she has already obtained.[7] In such a process, the teacher can reflect on her/his status of being a role model and improve this condition through presentation of appropriate behaviors and explanation of students' appropriate behaviors.[92]

BE AVAILABLE

Goleman believes that service orientation is a capability of those with high EI, and a person with such a capability is eager to help and serve customers. So, a clinical teacher with EI always makes himself/herself available to the learners and patients.

Sutkin, in a literature review study, stated that availability is a characteristic of a clinical teacher. Such a teacher is available for patients and learners after the teaching ends and is eager to help them. He/she also personally accepts the responsibility of meeting the patients' and learners' needs. Such a teacher spends much time on learners after her/his teaching, answers their questions, and holds discussions with them. Furthermore, he/she spends more time to observe students performance when they conduct interviews and physical examinations. He/she monitors the satisfaction of patients and learners with his/her teaching process and always seeks to do the same. He/she tries to plan her/his teaching based on learners' needs.[20]

CONCLUSION

Application of EI in teaching leads to improvement in the clinical teacher's performance. In the present study, 12 strategies that a clinical teacher may consider while adopting EI in teaching were reviewed. To use EI in clinical teaching, teachers should consider some factors such as physiological needs, learning goals, learning environment, teaching methods, and their professional behavior. These factors affect learners' and patients' emotional experiences and are be able to create a positive environment to increase learning and improve patient care by the students. Such a teacher keeps improving her/his own performance and meets the patients' and students' needs.

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Conflicts of interest

There are no conflicts of interest.

AUTHOR'S CONTRIBUTION

PA contributed in the conception of the work, conducting the study, revising the draft, approval of the final version of the manuscript, and agreed for all aspects of the work.

FH contributed in the conception of the work, conducting the study, revising the draft, approval of the final version of the manuscript, and agreed for all aspects of the work.

AO contributed in the conception of the work, literature search, analysis of data, conducting the study, revising the draft, approval of the final version of the manuscript, and agreed for all aspects of the work.

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